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DETAILED ACTION

Claims 1, 3-16, and 31-40 were rejected in the Office Action entered on 16 March 2009.

Applicants entered a Notice of Appeal on 16 September 2009.

A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 16 March 2010 has been entered.

The 16 March 2010 submission has amended claims 1, 13, and 36; and canceled claims 14-15, 33, and 39-40. Claims 1, 3-13, 16, 31-32, and 34-38 are pending.

Claims 1, 3-13, 16, 31-32, and 34-38 are rejected.

In the listing of the claims, the status identifier for claim 36 reads "Previously Presented" although the language of the claim bears strikethrough and underlined sections. The correct status identifier for claim 36 is therefore interpreted as "Amended".

Priority

1. Applicant's claim for domestic priority under 35 U.S.C. § 119(e) is acknowledged. The Examiner thanks Applicants for clarifying where support for the claims is found.

Applicants have submitted (27 July 2005) that:

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Support is believed to exist in the '303 and '040 applications for each of the now-pending claims. [...] Thus, it is believed that enabling support is found in the '303 application for claim 10, and for the same or similar reasons the '303 and '040 applications are believed to fully support the balance of the now-pending claims.

Applicants' arguments have established that the '303 and '040 application fully support the pending claims.

Claim Interpretation

2. Regarding the phrase "substantially instantaneously identical" as recited by claim 13, Applicants have submitted (27 July 2005) that:

One of skill in the art would readily appreciate that the meaning of the term "substantially instantaneously identical" reflects the context of the system in which the term is used. Thus for example where data is mirrored on two servers, as a practical matter, the same data is available to users of both servers on a timeframe that is otherwise compatible with system operation. As such, one of skill in the art would understand the subject claim limitation without the expression of an absolute time span.

3. Regarding the phrase "detail drawing" as recited by claim 1 and others, the Examiner provided an interpretation in the previous Office Action. In response, Applicants submit (28 February 2007) that:

In relation to the phrase "detail drawing," section 16.1 of provisional application 60/236,040 states that "[t]o create a new detail drawing... a dialog box will appear asking if you want to, 'Create a new detail drawing?' You will then be prompted to name the detail drawing..." Applicant respectfully submits that the term "detail drawing" thus refers to a discrete entity that can be "separately identified." The detail drawing is therefore not a functional equivalent of merely magnifying (zooming in on) an otherwise existing entity.

Additionally, the claim language has been amended to read "a separately identified detail drawing" (claim 1) and "a separately identified detailed layout" (claim 13). Applicants' interpretation is acknowledged.

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4. Regarding the phrase "markup lines" as recited by claim 21, Applicants submit (28 February 2007) that "the term 'markup line' refers to a visual indication of a change proposed or made to a plan record." The Examiner thanks Applicants for this clarification. Applicants' interpretation is acknowledged.

Response to Arguments - 35 USC § 112

5. In response to the cancellation of claims 39 and 40, the previous rejection of claims 39 and 40 under 35 U.S.C. § 112, second paragraph, are withdrawn.

Response to Arguments - 35 USC § 103

6. In response to the previous rejection of claims 1, 3-16, and 36-38 under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 6,499,006 to Rappaport in view of US Patent No. 5,821,937 to Tonelli, further in view of "CADDstar Version 5.0 Help Manual" by Hal-Tec Corporation (referred to as "Help Manual" in Applicants' remarks), Applicants argue primarily that:

Applicant respectfully notes that the newly added features of claim 1 correspond to those previously present in canceled claim 33.

[...]

The rejection of claim 33 should be withdrawn because the cited references do nothing to teach or suggest the features of a "fiber reel having an uneven buffer count" as claimed. Accordingly, amended claim 1 which now incorporates these features is clearly in condition for allowance.

[...]

[Bergman's "buffer"] is completely different from, and teaches directly away from, a "fiber reel having an uneven buffer count," as claimed. Accordingly, there is

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nothing in Bergman, or anywhere in the references now of record, to teach the unique and novel combination of features of claim 1.

The Examiner has fully considered this reference and has found it persuasive in part.

Applicants have persuasively shown that Bergman's "buffer" is different from the claimed buffer.

However, the "CADDstar Version 5.0 Help Manual" by Hal-Tec Corporation, which is also the assignee of this patent application, clearly and explicitly teaches an "optical communication component including a fiber reel having an uneven buffer count":

"To add a fiber reel to the Fiber Catalog, follow the list of bulleted instructions below.

[...] Buffer/Fiber Counts: [Click] the arrow to the right of the buffer field and [click] the number of buffers in your fiber reel. [Click] the arrow to the right of the fibers field and select the number of fibers existent within each buffer. If your fiber reel contains an uneven number of buffers and fibers, [click] the Uneven Fiber Counts check box. The Buffer/Fiber Counts... button will activate. [Click] the Buffer/Fiber Counts... button and set up the buffers and fibers in your reel in the dialog box that will appear." (CADDstar Version 5.0 Help Manual, Hal-Tec Corporation, "9.0 The Master Fiber Catalog", page 41 of 58)

Therefore Applicants have persuasively shown that the Bergman reference does not teach the claimed "buffer." Applicants have incorporated the "buffer" limitation from claim 33 into claim 1. However, because of the clear and explicit teachings of the CADDstar Help Manual, claim 1 is rejected using the previous combination of Rappaport, Tonelli, and "CADDstar Version 5.0 Help Manual" by Hal-Tec Corporation.

Regarding claim 13, Applicants argue primarily that:

[Claim 13 has been amended to recite "...said calculations portion being adapted to calculate power and signal relationships for individual optical fibers of different grades disposed within a single buffer."]

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Applicant respectfully submits that there is nothing in Rosenman, Rappaport, or Tonelli, whether taken alone or in combination, to teach or suggest the unique combination of features now in claim 13.

The Examiner respectfully traverses this argument as follows.

"CADDstar Version 5.0 Help Manual" by Hal-Tec Corporation, which is also the assignee of this application, teaches a "calculations portion being adapted to calculate power and signal relationships for individual optical fibers of different grades disposed within a single buffer" for the following reasons:

In section 9.3.1.1 Add Fiber Type, the CADDstar Help Manual teaches the creation of fiber types of different grades [*"To add a Fiber Type, [click] the Add Fiber Type button in the Fibers, Connectors, and Attenuators dialog box... To add a new Fiber Type to your Fiber Catalog follow the bulleted instructions below... Losses: Input the appropriate losses for the fiber type you are setting up in the losses field. These are based on the Manufacturer's specifications."*].

In section 9.4.1 Add a Fiber Reel, the CADDstar Help Manual teaches the creation of a fiber reel including selected fibers [*"To add a fiber reel to the Fiber Catalog, [click] the Add a Fiber Reel button in the Fiber Reels menu... To add a fiber reel to the Fiber Catalog, follow the list of bulleted instructions below... [Click] the Buffer/Fiber Counts... button and set up the buffers and fibers in your reel in the dialog box that will appear."*].

In section 10.17 Splicing Optical Fibers, the CADDstar Help Manual demonstrates the calculation of a signal loss for a plurality of fibers in a fiber reel (See in particular section "10.17 Splicing Optical Fibers"; and Figures 10.17.3 and 10.17.1 showing "Loss" calculated for a plurality of fiber optic splices).

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Although the examples in section 10.17 show the same "0.10" loss for each of fibers 1 through 12, the clear teachings of CADDstar Version 5.0 Help Manual provide for the creation of a fiber reel comprising a plurality of fibers of different grades (i.e. with various different "losses"). The individual fibers are defined as in section 9.3.1.1, the fiber reel is defined as in section 9.4.1, and the "calculations portion being adapted to calculate power and signal relationships for individual optical fibers of different grades disposed within a single buffer" is shown in section 10.17.

Applicants' argument has been fully considered but has been found unpersuasive.

Regarding claim 36, Applicants have amended the claim similarly to claim 13 and present similar arguments. That argument has been fully considered and is traversed as shown above.

Regarding the various dependent claims, Applicants refer to the remarks submitted for the independent claims, which have been addressed above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 1, 3-6, and 36-38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 6,499,006 to Rappaport et al. in view of US Patent No. 5,821,937 to Tonelli et al., further in view of "CADDstar Version 5.0 Help Manual" by Hal-Tec Corporation.

Regarding claim 1, Rappaport teaches a method for deploying a fiber optic communication network (column 1, lines 25-48) comprising:

Storing an attribute of an optical communication component in a catalog database entry (column 4, lines 46-50; column 6, lines 36-60) referred to as a computer parts database;

Associating the catalog database entry with a design profile (column 6, lines 40-44; column 8, lines 23-35);

Selecting and reading the attribute from the database entry (column 6, lines 40-44);

Associating the attribute with a planned deployment of a physical instance of the component (column 8, lines 23-35); and

Forming a visible image representing said planned deployment (column 4, lines 33-50).

Tonelli teaches forming a visible image representing a planned deployment of a physical instance of a component, said visible image including a separately identified integrated detail drawing [(FIG. 31); *"For example, devices and media connections may be grouped into collections (logical partitions) to simplify working with complex network designs. Physically, a collection is a design sheet. Multiple collections may be linked to each other via off-page connections between their corresponding design sheets. Each collection is represented as an icon when collapsed, and when the user double clicks the left mouse button on an icon, the*

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design sheet corresponding to the icon is displayed in the application window. Referring to FIG. 31, the devices and media connections on each floor of an office building 326 are grouped into separate collections 320, 322, 324. The user imported a country map 328 and populated the country map with multiple building collections 326, 330, 332. The user may also import a world map and populate it with country collections (not shown). Design sheets are hierarchical."
(column 15, lines 22-67)]

"CADDstar Version 5.0 Help Manual" teaches storing an attribute of an optical communication component in a computer catalog database entry, said optical communication component including a fiber reel having an uneven buffer count [*"To add a fiber reel to the Fiber Catalog, follow the list of bulleted instructions below... Buffer/Fiber Counts: [Click] the arrow to the right of the buffer field and [click] the number of buffers in your fiber reel. [Click] the arrow to the right of the fibers field and select the number of fibers existent within each buffer. If your fiber reel contains an uneven number of buffers and fibers, [click] the Uneven Fiber Counts check box. The Buffer/Fiber Counts... button will activate. [Click] the Buffer/Fiber Counts... button and set up the buffers and fibers in your reel in the dialog box that will appear."*
(CADDstar Version 5.0 Help Manual, Hal-Tec Corporation, "9.0 The Master Fiber Catalog", page 41 of 58)]

"CADDstar Version 5.0 Help Manual" further teaches calculating an optical loss, including a loss associated with an optical fiber splice (See in particular section "10.17 Splicing Optical Fibers"; and Figures 10.17.3 and 10.17.1 showing "Loss" calculated for a plurality of fiber optic splices).

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Rappaport, Tonelli, and "CADDstar Version 5.0 Help Manual" are analogous art because all are drawn to network design tools.

It would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to combine the teachings of Tonelli and Rappaport by incorporating the features shown in Tonelli FIG. 31 and described in Tonelli column 15 with the design tool taught by Rappaport. Motivation to combine the references is found in the express teachings of Tonelli, such as to design or maintain a complex network layout with the ability to view details down to the individual device [*"An important aspect of designing and maintaining networks is being able to quickly assess the current network configuration down to the device configuration level. Such information is helpful in troubleshooting network problems and in updating a network system."* (Tonelli, column 2, lines 16-22)].

It would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to combine the teachings of "CADDstar Version 5.0 Help Manual" with Rappaport in view of Tonelli by combining the optical fiber splice loss calculation with the design tool taught by Rappaport. Motivation to combine the references is found in the express teachings of "CADDstar Version 5.0 Help Manual" such as to have *"fully integrated facilities management of drafting, RF/Coaxial design, and fiber design to allow for landbase drafting, digitizing, and design"* (CADDstar, section "1.0 CADDStar Map Overview").

Therefore it would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to combine the teachings of Rappaport, Tonelli, and "CADDstar Version 5.0 Help Manual" to arrive at the invention specified in claim 1.

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Regarding claim 3, Rappaport teaches a computer-implemented method (column 4, lines 33-50) and recording associations in a computer database (column 6, lines 40-49).

Regarding claim 4, Rappaport does not explicitly teach physically deploying a physical instance of the component. However, Rappaport does teach a network design tool (column 5, lines 57-65; column 8, lines 23-35) and therefore it would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to physically deploy the network after it has been designed.

Regarding claims 5 and 6, Rappaport teaches identifying a geographic location for the network and displaying a graphical representation of the geographic location (column 4, lines 3-9; column 4, lines 33-38; column 8, lines 44-57).

Regarding claim 36, Rappaport teaches a method for deploying a fiber optic communication network (column 1, lines 25-48) comprising:

Storing an attribute of an optical communication component in a catalog database entry (column 4, lines 46-50; column 6, lines 36-60) referred to as a computer parts database;

Associating the catalog database entry with a design profile (column 6, lines 40-44; column 8, lines 23-35);

Selecting and reading the attribute from the database entry (column 6, lines 40-44);

Associating the attribute with a planned deployment of a physical instance of the component (column 8, lines 23-35); and

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Forming a visible image representing said planned deployment (column 4, lines 33-50).

Tonelli teaches forming a visible image representing a planned deployment of a physical instance of a component, said visible image including a separately identified integrated detail drawing [(FIG. 31); *"For example, devices and media connections may be grouped into collections (logical partitions) to simplify working with complex network designs. Physically, a collection is a design sheet. Multiple collections may be linked to each other via off-page connections between their corresponding design sheets. Each collection is represented as an icon when collapsed, and when the user double clicks the left mouse button on an icon, the design sheet corresponding to the icon is displayed in the application window. Referring to FIG. 31, the devices and media connections on each floor of an office building 326 are grouped into separate collections 320, 322, 324. The user imported a country map 328 and populated the country map with multiple building collections 326, 330, 332. The user may also import a world map and populate it with country collections (not shown). Design sheets are hierarchical."* (column 15, lines 22-67)].

Tonelli teaches performing a system calculation considering small-scale features represented in the detail drawing and large-scale features otherwise represented in the visible image [*"Network Audit Software"* (column 18, line 11 – column 22, line 25) describes several "system calculations". The network components (in any of the hierarchical displays) are included in the system calculations. Alternatively, Tonelli teaches various steps of "validating" the network configuration, for example (column 17, lines 11-17)].

"CADDstar Version 5.0 Help Manual" teaches calculating an respective optical losses for optical fibers of different grades disposed within a single buffer [*"To add a Fiber Type, [click]*

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the Add Fiber Type button in the Fibers, Connectors, and Attenuators dialog box... To add a new Fiber Type to your Fiber Catalog follow the bulleted instructions below... Losses: Input the appropriate losses for the fiber type you are setting up in the losses field. These are based on the Manufacturer's specifications." ("CADDstar Version 5.0 Help Manual, section 9.3.1.1); *"To add a fiber reel to the Fiber Catalog, [click] the Add a Fiber Reel button in the Fiber Reels menu... To add a fiber reel to the Fiber Catalog, follow the list of bulleted instructions below... [Click] the Buffer/Fiber Counts... button and set up the buffers and fibers in your reel in the dialog box that will appear."* ("CADDstar Version 5.0 Help Manual, section 9.4.1); and the CADDstar Help Manual demonstrates the calculation of a signal loss for a plurality of fibers in a fiber reel (See in particular section "10.17 Splicing Optical Fibers"; and Figures 10.17.3 and 10.17.1 showing "Loss" calculated for a plurality of fiber optic splices)].

Although the examples in section 10.17 show the same "0.10" loss for each of fibers 1 through 12, the clear teachings of CADDstar Version 5.0 Help Manual provide for the creation of a fiber reel comprising a plurality of fibers of different grades (i.e. with various different "losses"). The individual fibers are defined as in section 9.3.1.1, the fiber reel is defined as in section 9.4.1, and the "calculations portion being adapted to calculate power and signal relationships for individual optical fibers of different grades disposed within a single buffer" is shown in section 10.17.

Rappaport, Tonelli, and "CADDstar Version 5.0 Help Manual" are analogous art because all are drawn to network design tools.

It would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to combine the teachings of Tonelli and Rappaport by incorporating the

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features shown in Tonelli FIG. 31 and described in Tonelli column 15 with the design tool taught by Rappaport. Motivation to combine the references is found in the express teachings of Tonelli, such as to design or maintain a complex network layout with the ability to view details down to the individual device [*"An important aspect of designing and maintaining networks is being able to quickly assess the current network configuration down to the device configuration level. Such information is helpful in troubleshooting network problems and in updating a network system."* (Tonelli, column 2, lines 16-22)].

It would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to combine the teachings of "CADDstar Version 5.0 Help Manual" with Rappaport in view of Tonelli by combining the optical fiber splice loss calculation with the design tool taught by Rappaport. Motivation to combine the references is found in the express teachings of "CADDstar Version 5.0 Help Manual" such as to have *"fully integrated facilities management of drafting, RF/Coaxial design, and fiber design to allow for landbase drafting, digitizing, and design"* (CADDstar, section "1.0 CADDStar Map Overview").

Therefore it would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to combine the teachings of Rappaport, Tonelli, and "CADDstar Version 5.0 Help Manual" to arrive at the invention specified in claim 36.

Regarding claims 37 and 38, Rappaport teaches a calculations portion adapted to calculate power and signal relationships within a communications network (column 7, lines 10-27, etc.).

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8. Claims 7-9, 12, 31-32, and 34-35 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 6,499,006 to Rappaport in view of US Patent No. 5,821,937 to Tonelli, further in view of "CADDstar Version 5.0 Help Manual" by Hal-Tec Corporation as applied to claims 1 and 5 above, and further in view of US Patent No. 4,866,704 to Bergman.

Regarding claims 7-9, 12, 31-32, and 34-35, Rappaport in view of Tonelli does not explicitly teach the fiber optic equipment recited by these claims.

Bergman teaches the fiber optic equipment recited by these claims (title, abstract, columns 1-2, etc.).

Bergman and Rappaport in view of Tonelli, further in view of "CADDstar Version 5.0 Help Manual" are analogous art because both are drawn to communications networks.

Therefore it would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to combine the teachings of the prior art to arrive at the inventions specified in claims 7-9, 12, 31-32, and 34-35 as expressly motivated by Bergman, such as to design a network for spacecraft environments [*"This invention provides an asynchronous, high-speed, fiber optic local area network originally developed for tactical environments, such as military field communications systems, but having additional specific benefits for other environments such as spacecraft and the like."* (column 3, lines 11-34)].

9. Claims 10-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 6,499,006 to Rappaport in view of US Patent No. 5,821,937 to Tonelli, further in view of "CADDstar Version 5.0 Help Manual" by Hal-Tec Corporation as applied to claim

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1 above, and further in view of US Patent No. 5,761,432 to Bergholm et al., hereafter referred to as Bergholm.

Regarding claims 10 and 11, Rappaport in view of Tonelli, further in view of "CADDstar Version 5.0 Help Manul" teaches the limitations of claim 1.

Bergholm teaches a planned deployment including identification of an instance with an owner (column 2, lines 39-63; column 4, lines 13-24).

Bergholm and Rappaport in view of Tonelli, further in view of "CADDstar Version 5.0 Help Manual" are analogous art because both are directed to network design.

It would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to combine the teachings of Bergholm with Rappaport in view of Tonelli by incorporating the attributes described by Bergholm, including ownership of the network equipment, in the computer parts database of Rappaport. The motivation to do so is expressly provided by Bergholm, such as to apprise network builders of inventory information and designing links to implement orders (Bergholm, column 1, lines 55-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to combine the teachings of Bergholm with Rappaport and Tonelli to arrive at the invention specified in claims 10 and 11.

10. Claims 13 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over "Modelling Multiple View Of Design Objects In A Collaborative Cad Environment" by Rosenman in view of US Patent No. 6,499,006 to Rappaport, further in view of "CADDstar Version 5.0 Help Manual" by Hal-Tec Corporation.

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Regarding claim 13, Rosenman teaches a first computer including a first memory storage device having application software encoded therein; a second computer, operatively connected to said first computer, having a second memory storage device adapted to record first project data; and a third computer, operatively connected to said second computer, having a third memory storage device adapted to record second project data, said first and second project data being substantially instantaneously identical (pages 21-23, “Computer-Supported Collaborative Design”);

Said software including a catalog portion being adapted to receive data defining a plurality of communication network components (page 22, “Design Object Database System”);

Said first data including a logical model (pages 21-23, “Computer-Supported Collaborative Design”).

Rosenman does not explicitly teach the claimed “design profile portion,” “calculations portion,” or “detail drawing portion.”

Rappaport teaches a design profile portion adapted to receive data defining a plurality of design rules related to logical design of a network [*“Each component utilizes electromechanical information available from the parts list library that fully describes the component in terms of its physical operating characteristics (e.g., the noise figure, frequency, radiation characteristics, etc.). This information is directly utilized during the prediction of wireless system performance metrics.”* (column 6, lines 26-60)].

Rappaport teaches a calculations portion adapted to calculate power and signal relationships within a communications network components (column 7, lines 10-27; column 4, lines 13-32, etc.). Rappaport teaches a multiple dwelling unit (FIG. 3, etc.).

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"CADDstar Version 5.0 Help Manual" teaches calculating an respective optical losses for optical fibers of different grades disposed within a single buffer [*"To add a Fiber Type, [click] the Add Fiber Type button in the Fibers, Connectors, and Attenuators dialog box... To add a new Fiber Type to your Fiber Catalog follow the bulleted instructions below... Losses: Input the appropriate losses for the fiber type you are setting up in the losses field. These are based on the Manufacturer's specifications."* ("CADDstar Version 5.0 Help Manual, section 9.3.1.1); *"To add a fiber reel to the Fiber Catalog, [click] the Add a Fiber Reel button in the Fiber Reels menu... To add a fiber reel to the Fiber Catalog, follow the list of bulleted instructions below... [Click] the Buffer/Fiber Counts... button and set up the buffers and fibers in your reel in the dialog box that will appear."* ("CADDstar Version 5.0 Help Manual, section 9.4.1); and the CADDstar Help Manual demonstrates the calculation of a signal loss for a plurality of fibers in a fiber reel (See in particular section "10.17 Splicing Optical Fibers"; and Figures 10.17.3 and 10.17.1 showing "Loss" calculated for a plurality of fiber optic splices)].

Although the examples in section 10.17 show the same "0.10" loss for each of fibers 1 through 12, the clear teachings of CADDstar Version 5.0 Help Manual provide for the creation of a fiber reel comprising a plurality of fibers of different grades (i.e. with various different "losses"). The individual fibers are defined as in section 9.3.1.1, the fiber reel is defined as in section 9.4.1, and the "calculations portion being adapted to calculate power and signal relationships for individual optical fibers of different grades disposed within a single buffer" is shown in section 10.17.

Rosenman, Rappaport, and "CADDstar Version 5.0 Help Manual" are all analogous art because all are drawn to CAD.

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Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Rappaport with Rosenman as expressly motivated by Rappaport, such as to simplify the design task [*“Using the present method, it is now possible to assess the performance of a wireless communication system to a much higher level of precision than previously possible... The design of wireless communication systems is often a very complex and arduous task, with a considerable amount of effort required to simply analyze the results of predicted performance.”* (column 5, lines 52-65)]. It would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to combine the teachings of "CADDstar Version 5.0 Help Manual" with Rosenman in view of Rappaport by combining the optical fiber splice loss calculation with the design tool taught by Rappaport. Motivation to combine the references is found in the express teachings of "CADDstar Version 5.0 Help Manual" such as to have *"fully integrated facilities management of drafting, RF/Coaxial design, and fiber design to allow for landbase drafting, digitizing, and design"* (CADDstar, section "1.0 CADDStar Map Overview").

Therefore it would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to combine the teachings of the prior art to arrive at the invention specified in claim 13.

Regarding claim 16, Rappaport teaches a software method for designing a network comprising a wireless communication portion (column 5, lines 52-65).

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11. Claims 1, and 3-12, 31-32, and 34-35 are rejected under 35 U.S.C. § 103(a) as being unpatentable over “CADDstar version 5.0 help manual” by Hal-Tec Corporation in view of US Patent No. 5,821,937 to Tonelli et al., hereafter referred to as Tonelli.

Applicants' remarks (2 February 2009, page 15) allege that "CADDstar Version 5.0 Help Manual" fails to teach "calculating an optical loss, including a loss associated with an optical fiber splice".

"CADDstar Version 5.0 Help Manual" clearly teaches these limitations. See, in particular, section "10.17 Splicing Optical Fibers" and Figures 10.17.3 and 10.17.1.

Applicants' remarks (16 March 2010, page 10) allege that none of the references of record, including "CADDstar Version 5.0 Help Manual" teach "an optical communication component in a computer catalog database entry, said optical communication component including a fiber reel having an uneven buffer count".

"CADDstar Version 5.0 Help Manual" clearly teaches these limitations. See, in particular, section "9.4.1 Add a Fiber Reel".

Applicants' remarks (15 July 2008, page 16) distinguish claim 1 from the “CADDstar version 5.0 help manual” by way of the “detail drawing” limitation.

Tonelli teaches a “separately identified detail drawing” [(FIG. 31); *For example, devices and media connections may be grouped into collections (logical partitions) to simplify working with complex network designs. Physically, a collection is a design sheet. Multiple collections may be linked to each other via off-page connections between their corresponding design sheets. Each collection is represented as an icon when collapsed, and when the user double clicks the left mouse button on an icon, the design sheet corresponding to the icon is displayed in the*

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application window. Referring to FIG. 31, the devices and media connections on each floor of an office building 326 are grouped into separate collections 320, 322, 324. The user imported a country map 328 and populated the country map with multiple building collections 326, 330, 332. The user may also import a world map and populate it with country collections (not shown). Design sheets are hierarchical." (column 15, lines 22-67)]

"CADDstar version 5.0 Help Manual" and Tonelli are analogous art because both are drawn to CAD.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Tonelli with "CADDstar version 5.0 Help Manual" as expressly motivated by Tonelli, such as to design or maintain a complex network layout with the ability to view details down to the individual device [*"An important aspect of designing and maintaining networks is being able to quickly assess the current network configuration down to the device configuration level. Such information is helpful in troubleshooting network problems and in updating a network system."* (Tonelli, column 2, lines 16-22)].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Proctor whose telephone number is (571) 272-3713. The examiner can normally be reached on 8:30 am-4:30 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached at (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jason Proctor/
Primary Examiner, Art Unit 2123

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